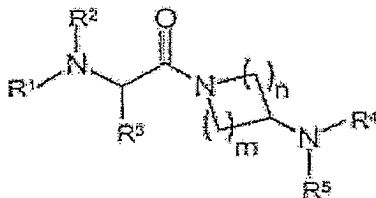


AMENDMENTS TO THE CLAIMS

1-20. (Cancelled).

21. (New) A compound of the following formula (1):



in which

m and n each independently represents 1 or 2,

R<sup>1</sup> represents

hydrogen;

heterocycle which is unsubstituted, or mono- or polysubstituted by substituents selected from halogen and C<sub>1</sub>-C<sub>10</sub>-alkyl;

-(CH<sub>2</sub>)<sub>1-3</sub>-R<sup>6</sup>, wherein R<sup>6</sup> is selected from the group consisting of hydrogen, C<sub>1</sub>-C<sub>10</sub>-alkyl, C<sub>1</sub>-C<sub>8</sub>-alkoxy, heterocycle, hydroxy, C<sub>1</sub>-C<sub>8</sub>-alkoxycarbonyl, carboxy, amino, C<sub>1</sub>-C<sub>10</sub>-alkylamino, di(C<sub>1</sub>-C<sub>10</sub>-alkyl)amino, and C<sub>1</sub>-C<sub>8</sub>-alkylcarbonylamino; wherein heterocycle is substituted by one or more substituents selected from the group consisting of halogen, oxo, hydroxy, C<sub>1</sub>-C<sub>10</sub>-alkyl, C<sub>1</sub>-C<sub>8</sub>-alkylcarbonyl and C<sub>6</sub>-C<sub>10</sub>-aryloxy;

glycine, alanine, histidine, phenylalanine or proline; wherein one or more hydrogen atoms on nitrogen atom are unsubstituted or substituted by a substituent selected from the group consisting of C<sub>1</sub>-C<sub>10</sub>-alkyl, C<sub>1</sub>-C<sub>8</sub>-alkylcarbonyl, C<sub>1</sub>-C<sub>8</sub>-alkoxycarbonyl and C<sub>1</sub>-C<sub>8</sub>-alkylsulfonyl; or

-SO<sub>2</sub>-C<sub>1</sub>-C<sub>3</sub>-alkyl,

R<sup>2</sup> represents

hydrogen;

C<sub>1</sub>-C<sub>8</sub>-alkyl;  
-CO-(CH<sub>2</sub>)<sub>1-3</sub>-hydroxy; or  
-CH<sub>2</sub>-CO-hydroxy,

R<sup>3</sup> represents

C<sub>1</sub>-C<sub>8</sub>-alkyl which is unsubstituted, or mono- or polysubstituted by substituents selected from C<sub>1</sub>-C<sub>8</sub>-alkyl and carbamoyl;  
-(CH<sub>2</sub>)<sub>1-3</sub>-C<sub>3</sub>-C<sub>8</sub>-cycloalkyl; or  
-(CH<sub>2</sub>)<sub>0-3</sub>-C<sub>6</sub>-C<sub>10</sub>-aryl which is unsubstituted, or mono- or polysubstituted by substituents selected from the group consisting of halogen, hydroxy, C<sub>1</sub>-C<sub>8</sub>-alkoxy and C<sub>1</sub>-C<sub>8</sub>-alkyl,

R<sup>4</sup> represents

C<sub>1</sub>-C<sub>8</sub>-alkyl;  
-(CH<sub>2</sub>)<sub>1-3</sub>-C<sub>3</sub>-C<sub>8</sub>-cycloalkyl;  
C<sub>3</sub>-C<sub>8</sub>-cycloalkyl which is unsubstituted, or mono- or polysubstituted by substituents selected from the group consisting of halogen, C<sub>1</sub>-C<sub>8</sub>-alkyl and C<sub>6</sub>-C<sub>10</sub>-aryl;  
spiro[2,5]octan; or  
heterocycle,

R<sup>5</sup> represents

carbonyl substituted by a substituent selected from the group consisting of C<sub>1</sub>-C<sub>8</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub> alkoxy, C<sub>3</sub>-C<sub>7</sub>-cycloalkyl, heterocycle and C<sub>6</sub>-C<sub>10</sub>-aryl unsubstituted or substituted by hydroxy; wherein alkyl is unsubstituted, or mono- or polysubstituted by substituents selected from the group consisting of amino, C<sub>1</sub>-C<sub>8</sub>-alkylamino, di(C<sub>1</sub>-C<sub>8</sub>-alkyl)amino, hydroxy, C<sub>1</sub>-C<sub>8</sub>-alkoxy, C<sub>6</sub>-C<sub>10</sub>-ar C<sub>1</sub>-C<sub>8</sub>-alkyloxy, C<sub>1</sub>-C<sub>8</sub>-alkyl C<sub>6</sub>-C<sub>10</sub>-aryloxy, C<sub>6</sub>-C<sub>10</sub>-aryloxy, C<sub>6</sub>-C<sub>10</sub>-arylthio, formyl, C<sub>2</sub>-C<sub>8</sub>-alkanoyloxy, C<sub>3</sub>-C<sub>8</sub>-cycloalkylcarbonyloxy, C<sub>6</sub>-C<sub>10</sub>-arylcarbonyloxy unsubstituted or substituted by halogen, C<sub>6</sub>-C<sub>10</sub>-ar C<sub>1</sub>-C<sub>8</sub>-alkylcarbonyloxy; cycloalkyl is unsubstituted, or mono- or polysubstituted by substituents selected from the group consisting of hydroxycarbonyl, C<sub>1</sub>-C<sub>8</sub>-alkoxycarbonyl,

hydroxyl-C<sub>1</sub>-C<sub>8</sub>-alkyl; and heterocycle is unsubstituted, or mono- or polysubstituted by the substituents selected from the group consisting of hydroxy, hydroxyC<sub>1</sub>-C<sub>8</sub>-alkyl, amino and 2-nitrobenzenesulfonyl;

-(CH<sub>2</sub>)<sub>1-3</sub>-C(=O)-C<sub>1</sub>-C<sub>6</sub>-alkoxy;

carbamoyl which is mono- or polysubstituted by substituents selected from the group consisting of hydrogen, C<sub>1</sub>-C<sub>8</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>3</sub>-C<sub>7</sub>-cycloalkyl, C<sub>6</sub>-C<sub>10</sub>-aryl and C<sub>1</sub>-C<sub>8</sub>-alkylcarbonyl substituted by hydroxy; wherein alkyl is unsubstituted, or mono- or polysubstituted by substituents selected from the group consisting of halogen, hydroxy, amino and C<sub>1</sub>-C<sub>8</sub>-alkoxy;

-(CH<sub>2</sub>)<sub>1-3</sub>-C(=O)N(C<sub>1</sub>-C<sub>8</sub>-alkyl)(C<sub>1</sub>-C<sub>8</sub>-alkyl);

-C(=S)N(H)(C<sub>1</sub>-C<sub>8</sub>-alkyl) or -C(=S)N(H)(C<sub>1</sub>-C<sub>8</sub>-alkyl)(C<sub>1</sub>-C<sub>8</sub>-alkyl); or

-SO<sub>2</sub>-NH<sub>2</sub> or -(CH<sub>2</sub>)<sub>0-3</sub>-SO<sub>2</sub>-C<sub>1</sub>-C<sub>8</sub>alkyl,

wherein heterocycle includes 1 to 2 heteroatom(s) from the group consisting of nitrogen atom, oxygen atom and sulfur atom, and represents 4- to 8-membered ring which can be fused with benzo or C<sub>3</sub>-C<sub>8</sub>-cycloalkyl, and which is saturated or has 1 or 2 double bond, or

a pharmaceutically acceptable salt, hydrate, or stereoisomer thereof.

22. (New) The compound according to claim 21, wherein

R<sup>1</sup> represents

hydrogen; or

-(CH<sub>2</sub>)<sub>1-3</sub>-R<sup>6</sup>, wherein R<sup>6</sup> selected from the group consisting of hydrogen, C<sub>1</sub>-C<sub>10</sub>-alkyl, C<sub>1</sub>-C<sub>8</sub>-alkoxy, heterocycle, hydroxy, C<sub>1</sub>-C<sub>8</sub>-alkoxycarbonyl, carboxy, amino, C<sub>1</sub>-C<sub>10</sub>-alkylamino, di(C<sub>1</sub>-C<sub>10</sub>-alkyl)amino, and C<sub>1</sub>-C<sub>8</sub>-alkylcarbonylamino; wherein heterocycle is substituted by one or more substituents selected from the group consisting of halogen, oxo, hydroxy, C<sub>1</sub>-C<sub>10</sub>-alkyl, C<sub>1</sub>-C<sub>8</sub>-alkylcarbonyl and C<sub>6</sub>-C<sub>10</sub>-aryloxy; or

a pharmaceutically acceptable salt, hydrate, or stereoisomer thereof.

23. (New) The compound according to claim 21, wherein  
 $R^2$  represents hydrogen or  $C_1$ - $C_6$ -alkyl, or  
a pharmaceutically acceptable salt, hydrate, or stereoisomer thereof.
24. (New) The compound according to claim 21, wherein  
 $R^3$  represents  $-\text{CH}_2$ -phenyl which is unsubstituted or mono- to tri-substituted by  
substituents selected from the group consisting of chloro, bromo, hydroxy,  
methoxy and methyl, or  
a pharmaceutically acceptable salt, hydrate, or stereoisomer thereof.
25. (New) The compound according to claim 21, wherein  
 $R^4$  represents  $C_3$ - $C_8$ -cycloalkyl which is unsubstituted, or mono- or  
polysubstituted by substituents selected from the group consisting of halogen,  
 $C_1$ - $C_8$ -alkyl and  $C_6$ - $C_{10}$ -aryl, or  
a pharmaceutically acceptable salt, hydrate, or stereoisomer thereof.
26. (New) The compound according to claim 21, wherein  
 $R^5$  represents carbonyl substituted by the substituent selected from the group  
consisting of  $C_1$ - $C_8$ -alkyl,  $C_1$ - $C_6$ -alkoxy,  $C_3$ - $C_7$ -cycloalkyl, heterocycle and  
 $C_6$ - $C_{10}$ -aryl unsubstituted or substituted by hydroxy; wherein alkyl is  
unsubstituted, or mono- or polysubstituted by the substituents selected from the  
group consisting of amino,  $C_1$ - $C_6$ -alkylamino, di( $C_1$ - $C_6$ -alkyl)amino, hydroxy,  
 $C_1$ - $C_8$ -alkoxy,  $C_6$ - $C_{10}$ -ar  $C_1$ - $C_8$ -alkyloxy,  $C_1$ - $C_8$ -alkyl  $C_6$ - $C_{10}$ -aryloxy,  
 $C_6$ - $C_{10}$ -aryloxy,  $C_6$ - $C_{10}$ -arylthio, formyl,  $C_2$ - $C_8$ -alkanoyloxy,  
 $C_3$ - $C_8$ -cycloalkylcarbonyloxy,  $C_6$ - $C_{10}$ -arylcarbonyloxy unsubstituted or substituted  
by halogen,  $C_6$ - $C_{10}$ -ar  $C_1$ - $C_8$ -alkylcarbonyloxy; cycloalkyl is unsubstituted, or  
mono- or polysubstituted by substituents selected from the group consisting of  
hydroxycarbonyl,  $C_1$ - $C_8$ -alkoxycarbonyl, hydroxyl-  $C_1$ - $C_8$ -alkyl; and heterocycle  
is unsubstituted, or mono- or polysubstituted by the substituents selected from the  
group consisting of hydroxy, hydroxy $C_1$ - $C_8$ -alkyl, amino and  
2-nitrobenzenesulfonyl, or

a pharmaceutically acceptable salt, hydrate, or stereoisomer thereof.

27. (New) An agonistic composition of melanocortin receptor comprising the compound of formula (1), or a pharmaceutically acceptable salt, hydrate, or stereoisomer thereof as defined in claim 21 together with a pharmaceutically acceptable carrier.